

REMARKS

The Drawings and the Specification have been amended. Claims 1, 11, 13 and 14 have been amended. No new matter has been added. Thus, claims 1 - 15 remain pending in the present application. It is respectfully submitted that, based on the following remarks, all of the presently pending claims are in condition for allowance.

The Drawings stand objected to as failing to depict the “recess” recited in claim 9. Fig. 1 of the drawings has been amended to add a reference character 134 pointing out the recess. It is respectfully submitted that the recess 134 is clearly depicted in the original drawings as housing the nut 132 therewithin. The amendment to the drawings merely adds a reference character to point out the recess, as shown in the Annotated Sheet also enclosed herewith. It is therefore respectfully submitted that no new matter has been entered in the present application. It is therefore respectfully requested that the objection to the Drawings be withdrawn.

The Specification stands objected to as failing to provide proper antecedent basis for the subject matter of claim 9. Paragraph [0019] of the Specification has been amended to recite “[a] screw spindle 130 adjustable by means of a nut 132 is mounted *in a recess 134 extending through* the lower end of the bow 110.” As noted above, this recess is clearly depicted in the drawings as originally filed. It is therefore respectfully submitted that this amendment does not constitute new matter. In light of the above noted amendments, it is respectfully requested that the objection to the Specification be withdrawn.

Claims 11-13 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Claim 11 has been amended to provide the proper antecedent basis for each of the objected elements. Specifically, amended claim 11 recites “[a] method for inserting distal angle-stable, long screws in the articular region of a bone ... so that *a point of emergence* of the distal, angle-stable long screws can be determined prior to drilling after the target plate ... it being possible directly to determine the length of the distal angle-stable long screw to be used and hence the depth of the hole to be drilled, in particular on the basis of a scale mounted on the screw spindle; removing the drill bushing; and inserting the distal angle-stable long bone screw while maintaining the compression of the bone.” In light of these amendment, it is respectfully

submitted that an antecedent basis is provided for the distal angle-stable long bone screw and the point of emergence in claim 11. Claim 13 has been amended to depend from claim 12, which provides the antecedent basis for the “bow” and “contact element.” In light of these amendments, it is respectfully requested that the objection to claims 11 and 13 be withdrawn.

Claims 1, 2 and 8-9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Saunders et al. (EP Patent No. 132284 A1) (hereinafter “Saunders”).

Amended claim 1 recites “[a]n aiming device for drilling a hole in a region of a bone which is in the vicinity of a joint, comprising a U-shaped bow having at least one contact element at a first end of the bow and, at a second end of the bow a screw spindle movable towards and away from the contact element and having a rotary grip, for clamping the device to the region of the bone in the vicinity of the joint, and a drill bushing, wherein the drill bushing can be removably inserted through the contact element, *the drill bushing being configured to guide insertion of an instrument therethrough and into a portion of bone in contact with the at least one contact element*, a bone compression produced by the bow persisting after removal of the drill bushing for insertion of a bone screw.”

It is respectfully submitted that Saunders fails to teach “a drill bushing, wherein the drill bushing can be removably inserted through the contact element, *the drill bushing being configured to guide insertion of an instrument therethrough and into a portion of bone in contact with the at least one contact element*,” as recited in amended claim 1. In the Final Office Action, the Examiner has analogized the ulna guide 12 of Saunders to the “drill bushing” of claim 1 and the portion of Saunders containing the pin 7 to the “contact element” of claim 1. However, it is respectfully submitted that the ulna guide 12 is not configured such that an instrument may be inserted therethrough and into a portion of bone in contact with the pin 7. Specifically, only a pin 13 of the ulna guide 12 is inserted into the U-shaped frame 1, with the plate portion 15 remaining external thereto to guide the formation of an arcuate cut along an outer periphery of the bone. (See Saunders, p. 4, li. 23 - p. 5, li. 5; Fig. 3). It is therefore respectfully submitted that the ulna guide 12 does not guide any instrument to a portion of bone being contacted by the pin 7 and rather, is explicitly configured so that an instrument inserted therethrough is separated from the pin 7 and a portion of bone contacting the pin 7. (*Id.*). It is submitted that claim 1 is allowable over Saunders for at least this reason.

It is further respectfully submitted that no other element in the device of Saunders is capable of overcoming this deficiency in the ulna guide 12. Specifically, Saunders also teaches that the hollow pin 11 which is adapted to receive a burr is spaced a selected distance from pin 9 “to oscillate through an arc about the axis of pin 9” to cause removal of the end of the humerus with a semi-circular cut (*Id.* at p. 4, ll. 13-22; Fig. 1). It is therefore further evident that Saunders is directed only to making arcuate cuts along an outer periphery of a bone and is therefore further incapable of being modified to overcome the above-recited deficiencies.

Furthermore, it is respectfully submitted that the term “bushing” has a plain meaning understood by those of skill in the art to refer to “a usually removable cylindrical lining for an opening (as of a mechanical part) used to limit the size of the opening, resist abrasion, or serve as a guide.” (*See* Definition, Merriam-Webster Online Dictionary, www.m-w.com). The Specification further supports this plain meaning by reciting that the “[c]ylindrical guide 111 and adaptor bushing 120 have an internal diameter which is suitable firstly for guiding a bone screw (not shown) and secondly for bearing a drill bush 140” wherein “[t]he drill bushing is then inserted into the orifice in the cylindrical guide and, passing through the adaptor bushing and the target plate; comes into contact with complementary internal thread in a bore of the implant” and wherein “[w]hen everything is correctly aligned, drilling can be effected through the integrated drill bushing.” (*See* Specification, ¶ [0008], [0009], [0019]; Figs. 1, 2, 6). It is therefore evident that the term “drill bushing” as used in the Specification and claims is in conformance with the common definition of the term bushing. Applicants therefore further submit that the ulna guide 12 does not meet the limitation of a bushing since the ulna guide 12 is not a “cylindrical lining.” It is respectfully submitted that claim 1 is allowable over Saunders for at least this additional reason.

It is therefore respectfully submitted that Saunders fails to teach or suggest “a drill bushing, wherein the drill bushing can be removably inserted through the contact element, *the drill bushing being configured to guide insertion of an instrument therethrough and into a portion of bone in contact with the at least one contact element,*” as recited in claim 1 and that claim 1 is therefore in condition for allowance. Because claims 2 and 8-9 depend from and therefore include all of the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Saunders in view of Sher et al. (U.S. Patent No. 4,364,381) (hereinafter “Sher”).

Claim 3 depends from and therefore includes all of the limitations of independent claim 1. It is respectfully submitted that Saunders and Sher, taken alone or in combination, fail to teach or suggest the limitations of independent claim 1. Claim 3 is therefore allowable as being dependent on an allowable base claim.

Claims 4-5 and 14-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saunders in view of Sher in further view of Gottfried (U.S. Patent No. 4,465,065).

Claims 4-5 depend from and therefore includes all of the limitations of claim 1. As noted above Saunders and Sher fail to teach or suggest the limitations of claim 1. Gottfried fails to cure these deficiencies. It is therefore respectfully submitted that Saunders, Sher and Gottfried, taken alone or in any combination, fail to teach or suggest the limitations of independent claim 1. Claims 4-5 are therefore allowable as being dependent on an allowable base claim.

Amended claims 14 recites limitations substantially similar to claim 1, including a kit for assembling a device for inserting angle-stable long screws in the articular region of a bone, the kit comprising “a U-shaped bow having a contact element at a first end and an adjustable screw spindle at a second end, a target bone plate which can be connected to the U-shaped bow, a drill bushing capable of being inserted through the contact element, *the drill bushing being configured to guide insertion of an instrument therethrough and into a portion of bone in contact with the contact element* and an implant which can be temporarily fixed to the target bone plate.”

It is therefore respectfully submitted that claim 14 and its dependent claim 15 are allowable over Saunders for the same reason noted above with respect to claim 1. It is further respectfully submitted that Sher and Gottfried also fail to teach or suggest any element meeting the limitation of a “*drill bushing being configured to guide insertion of an instrument therethrough and into a portion of bone in contact with the contact element,*” as recited in claim 14. Furthermore, it is submitted that the Examiner has not cited anything in Sher or Gottfried that meets or is capable of meeting this limitation. Rather, the only discussion the Examiner has offered with respect to Sher and Gottfried is directed to the limitation of a rotationally movable

adaptor bushing and a plug connection. (See 12/14/09 Office Action, pp. 5-7). It is respectfully submitted, however, that Sher and Gotfried fails to overcome the fact that Saunders is explicitly directed to the formation of only arcuate cuts located adjacent a bone joint. (See Saunders, p. 4, ll. 13- p. 5, li. 5; Figs. 1, 3). Specifically, Saunders does not teach or suggest a device *“configured to guide insertion of an instrument therethrough and into a portion of bone in contact with the contact element,”* as recited in claim 14 and is further incapable of being modified to overcome this deficiency as doing so would change the principle of operation of the Saunders device.

It is therefore respectfully submitted that claim 14 is allowable over Saunders, Sher and Gotfried, taken alone or in any combination. Because claim 15 depends from and therefore includes all of the limitations of claim 14, it is respectfully submitted that this claim is also allowable.

Claim 10 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Saunders in view of Pinkous (U.S. Patent No. 5,893,553).

Claim 10 depends from and therefore includes all of the limitations of independent claim 1. As noted above Saunders fails to teach or suggest the limitations of claim 1. Pinkous fails to cure these deficiencies. It is therefore respectfully submitted that Saunders and Pinkous, taken alone or in combination, fail to teach or suggest the limitations of independent claim 1. Claim 10 is therefore allowable as being dependent on an allowable base claim.

Claims 6 and 11-13 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Saunders in view of Sher in further view of Gotfried in further view of Davison. (U.S. Patent No. 4,710,075).

Claim 6 depends from and therefore includes all of the limitations of independent claim 1. As noted above Saunders and Sher fail to teach or suggest the limitations of claim 1. Gotfried and Davison fail to cure these deficiencies. It is therefore respectfully submitted that Saunders, Sher, Gotfried and Davison, taken alone or in any combination, fail to teach or suggest the limitations of independent claim 1. Claim 6 is therefore allowable as being dependent on an allowable base claim.

Amended claim 11 recites a method for inserting angle-stable, long screws in the articular region of a bone, comprising the steps of “screwing a target plate to a lateral implant prior to performing a target procedure, the target plate and lateral implant being mounted on an adaptor bushing of an aiming device by a plug connection; inserting a drill bushing into an orifice of a cylindrical guide, wherein the drill bushing, on passing through the adaptor bushing and the target plate, comes into contact with a complementary internal thread in a bore of the lateral implant, whereupon the target plate and lateral implant are placed together on a fragmented portion of the bone and clamped by a screw spindle of the aiming device and fixed through the implant by means of a proximal bone screw, so that a point of emergence of the distal, angle-stable long screws can be determined prior to drilling after the target plate and lateral implant have been correctly aligned, drilling can be effected through the integrated drill bushing, it being possible directly to determine the length of the distal angle-stable long screw to be used and hence the depth of the hole to be drilled, in particular on the basis of a scale mounted on the screw spindle; removing the drill bushing; and inserting the distal angle-stable long bone screw while maintaining the compression of the bone”

It is respectfully submitted, that Saunders, Sher, Gotfried and Davison, taken alone or in any combination, fail to teach or suggest the limitations of claim 11. Specifically, Saunders does not teach a method directed to drilling bone screws through a target portion of a bone but rather, to forming arcuate cuts along an outer periphery of a bone joint. (See Saunders, p. 4, ll. 13- p. 5, li. 5; Figs. 1, 3). It is respectfully submitted that the method of Saunders bears no resemblance to the method of claim 11 at all and, absent any recitation from the Examiner in the Office Action, it is unclear what support the Examiner has used in support of this rejection. It is apparent, however, that Saunders is not directed to the method of claim 11 and that Sher, Gotfried and Davison, taken alone or in any combination fail to overcome the deficiencies of Saunders for the same reasons discussed earlier. Applicants further respectfully request that the Examiner identify, with reference characters and citations, those specific recitations of the Saunders, Sher, Gotfried and Davison disclosure that accomplish the steps recited in claim 11. If the Examiner is unable to provide to Applicants an identification of those elements of these disclosures that overcome the limitations of claim 11, it is respectfully requested that the rejection of claims 11-13 be withdrawn.

Claim 7 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Saunders in

view of Sher in further view of Gotfried in further view of Davison in further view of Bliss (U.S. Patent No. 5,713,117).

Claim 7 depends from and therefore includes all of the limitations of independent claim 1. As noted above Saunders, Sher, Gotfried and Davison fail to teach or suggest the limitations of claim 1. Bliss fails to cure these deficiencies. It is therefore respectfully submitted that Saunders, Sher, Gotfried, Davison and Bliss, taken alone or in any combination, fail to teach or suggest the limitations of independent claim 1. Claim 7 is therefore allowable as being dependent on an allowable base claim.

In light of the foregoing, Applicants respectfully submit that all of the pending claims are in condition for allowance. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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By: 

Oleg V. Kaplun (Reg. No. 45,559)

Fay Kaplun & Marcin, LLP
150 Broadway, Suite 702
New York, NY 10038
Tel: (212) 619-6000
Fax: (212) 619-0276